STUDENT ID NO								

# MULTIMEDIA UNIVERSITY

## FINAL EXAMINATION

TRIMESTER 1, 2017/2018

## **DMG5028 - MANAGEMENT ACCOUNTING 2**

( All sections / Groups )

14 OCTOBER 2017 2.30 p.m - 5.30 p.m (3 Hours)

## INSTRUCTION TO STUDENTS

- 1. This question paper consists of 6 pages with 5 questions.
- 2. Answer ALL questions.
- 3. Write your answers in the answer booklet provided.

## **QUESTION 1**

#### Part A

Making decisions is an important management function. Management's decision-making process does not always follow a set pattern because decisions vary significantly in their scope, urgency and importance. It is possible, though, to identify some steps that are frequently involved in the process.

## Instruction

Identify four steps involved in management's decision-making process. (2 marks)

#### Part B

The new junior accountant at Stallion Steel evaluated the operating performance of the company's four product lines. The following presentation was made to the Board of Directors. During the presentation, the junior accountant made the recommendation to eliminate product line D4, stating the total net income would increase by RM66,000.

	Product Line		
	A1, B2 and C3	D4	
	RM	RM	
Sales	2,200,000	528,000	
Cost of goods sold	1,045,000	440,000	
Gross profit	1,155,000	88,000	
Operating expenses	880,000	154,000	
Net income	RM275,000	(RM66,000)	

For the other product lines, cost of goods sold is 70% variable and operating expenses are 65% variable. The cost of goods sold for product line D4 is 40% fixed and its operating expenses are 55% fixed. If product line D4 is eliminated, only RM50,000 of the fixed operating costs will be eliminated.

## Instruction

Do you concur with the new junior accountant's recommendation? Use incremental analysis to support your answer.

(9.5 marks)

#### Part C

On 1 January 2016, Tasty Food purchased a RM220,000 equipment for its manufacturing process. The equipment had a useful life of four years and was estimated to have no disposal value at the end of its useful life. The straight-line method of depreciation is used on this equipment. Annual operating costs with this equipment are RM130,000.

Approximately one year later, the company is approached by a salesperson who indicated that purchasing the equipment was a mistake. The salesperson recommends another equipment which has the same capabilities as the existing equipment, but with annual operating costs of only RM80,000. The new equipment will cost RM250,000 and has 3 years of useful life with no disposal value. In addition, the salesperson agrees to buy the old equipment from Tasty Food for RM110,000.

## Instructions

(a) If Tasty Food sells its old equipment on 1 January 2017, compute the gain or loss on the sale.

(2.5 marks)

(b) Using incremental analysis, determine if the company should purchase the new equipment. Why?

(6 marks)

[TOTAL 20 MARKS]

## **QUESTION 2**

#### Part A

Time-and-material pricing is an approach to cost-plus pricing in which the company uses two pricing rates, one for labour used on a job and another for the material.

## Instruction

Briefly explain what is material loading charge and how it is expressed.

(2 marks)

## Part B

Zappy Plastics produces industrial bins for manufacturers. The following information is given for the company.

	Per Unit	Total
Direct materials	RM80	***
Direct labour	55	
Variable manufacturing overhead	10	
Fixed manufacturing overhead		RM150,000
Variable selling & administrative expenses	5	10,000
Fixed selling & administrative expenses	J	80,000

The company has a desired ROI of 20%. It has invested assets of RM1,600,000. Zappy Plastics anticipates production of 5,000 units per year.

#### Instructions

(a) Compute each of the following under the absorption-cost approach:

(i) Markup percentage needed to provide the desired ROI.

(8.5 marks)

(ii) Target price of the industrial bins.

(2 marks)

(b) Compute each of the following under the variable-cost approach:

(i) Markup percentage needed to provide the desired ROI.

(5.5 marks)

(ii) Target price of the industrial bins.

(2 marks)

[TOTAL 20 MARKS]

## **QUESTION 3**

#### Part A

Lifelong University has two principal operating departments, Management and Engineering; and two support departments, Maintenance and Admission. Maintenance Department costs are allocated first on the basis of budgeted maintenance-hours, then Admission Department costs are allocated based on the number of credit hours. Data on budgeted maintenance-hours and number of credit hours are as follows:

Departmental costs before allocation Maintenance-hours Number of credit hours

Service Departments		
Maintenance	Admission	
RM150,000	RM360,000	
-	4,000	
4,000	_	

Operating Departments		
Management Engineering		
RM310,000	RM420,000	
5,000	6,000	
24,000	36,000	

## Instruction

Using the step-down method, allocate the service department costs to the operating departments.

(6 marks)

## Part B

JW Manufacturing uses a manufacturing facility costing RM350,000 per year, with only 80% of the facility's capacity currently being used. A start-up business has proposed a plan that would utilise the other 20% of the facility and increase the overall costs of maintaining the space by 5%.

#### Instruction

If the stand-alone method were used, calculate the amount of cost that would be allocated to the start-up business.

(2 marks)

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## Part C

Milky Milk processes unprocessed goat milk up to the splitoff point where two products, condensed goat milk and goat milk cheese result. The following information was collected for the last month of the year:

Direct materials processed	: 49,000 gallons (after shrinkage)		
Production	: Condensed goat milk Goat milk cheese	26,300 gallons 22,700 gallons	
Sales	: Condensed goat milk Goat milk cheese	RM14 per gallon RM8 per gallon	

The costs of purchasing unprocessed goat milk and processing it up to the splitoff point to yield a total of 49,000 gallons of saleable product was RM80,000. There were no inventory balances of either product.

Condensed goat milk may be processed further to yield 26,250 gallons of a medicinal milk product, G10, for an additional processing cost of RM4 per usable gallon. G10 can be sold for RM20 per gallon. There was no beginning inventory, but the company sold 25,000 gallons that month.

Goat milk cheese can be processed further to yield 22,500 gallons of cheesy ice cream, Z10, for an additional processing cost per usable gallon of RM3. The product can be sold for RM11 per gallon. There was no beginning inventory, but the company sold 22,000 gallons that month.

#### Instruction

Calculate Milky Milk's gross margin percentage for G10 and Z10 when joint costs are allocated using the net realizable value method. (Hint: Round up the production cost per gallon to the nearest ringgit).

(12 marks)

[TOTAL 20 MARKS]

## **QUESTION 4**

Hap Hip Sdn. Bhd. is a Malaysian based company that manufactures magnets for souvenir shops in Melaka, Sabah and Sarawak. On 1 January 2017, the top management of the company met and agreed on the following information:

- Budgeted sales of magnets for the first quarter is 10,000 units, followed by a 10% increase in the second. Due to the lack of festive seasons in the third quarter of the year, budgeted sales of magnet in the third quarter is expected to be the same as the second quarter.
- Budgeted selling price of the magnets is RM20 per unit, with a 10% increase in the second quarter.
- Ending raw materials inventory should be at least 20% of the next quarter's production requirements.
- Ending finished good inventory should be at least 35% of the next quarter's expected sales units.
- Third quarter production units are expected to be 11,100 magnets.

The ending raw material and finished goods inventories as at 31 December 2016 follows the same percentage relationships to production and sales as stated in 2017. Eight grams of raw materials are required to make each unit of magnet and each gram costs RM0.50.

In addition, each magnet requires 2 hours of direct labour hour and the wage rate per hour is expected to be RM3.

## Instruction

Prepare the following budgets by quarters for the six-month period ended 30 June 2017:

	• •	
(a)	Sales budget	(4 marks)
(b)	Production budget	(4.5 marks)
(c)	Direct materials budget	(8 marks)
(d)	Direct labour budget	(3.5 marks)

[TOTAL 20 MARKS]

## **QUESTION 5**

## PART A

Bailey Bakery is a famous bakery in Malaysia and they specialise in two products, making luxurious wedding cakes and special order birthday cakes. As the bakery grows, the owner of Bailey Bakery has decided to adopt activity-based costing method to calculate the costs of the cakes. She has identified five activity cost pools and information for the year 2017 was presented as below.

		<b>Estimated</b>	Cost Drivers by Product	
Activity Cost Pool	Cost Driver	Overhead (RM)	Wedding Cakes	Birthday Cakes
Ordering	Orders	15,000	150	225
Baking	Hours	146,000	1,850	1,070
Frosting	Parts	38,200	1,060	850
Packing	Boxes	4,500	150	225
Delivering	Trips	3,750	150	225

## Instructions

- (a) Compute the overhead rates using the activity-based approach. (3 marks)
- (b) Compute the overhead cost per unit for each product. Assume the bakery produced 300 wedding cakes and 563 birthday cakes. (7 marks)

#### Part B

Harvester Haven Sdn. Bhd. manufactures metal garden spades that it sells to various nurseries and shopping malls in Malaysia. It has identified that each unit of metal garden spade will require 2 kg of metal at a standard price of RM4.00 per kg and they will incur 1.5 hours of labour for each unit of metal spade at a standard cost of RM12.00 per hour. The predetermined overhead rate for each metal garden spade is RM6.00 per labour hour.

In the year 2016, Harvester Haven planned to produce 150,000 metal garden spades at a level of 225,000 hours of direct labour. At the end of the year 2016, the company had produced 140,000 metal garden spades and had purchased 300,000 kg of metal at a cost of RM1,260,000. Metal used in the production during the year were 252,000 kg. Direct labour costs were RM2,596,000 for 220,000 direct labour hours actually worked. Total manufacturing overhead was RM1,150,000.

## Instructions

(a)	Calculate the material price variance.	(2.5 marks)
(b)	Calculate the material quantity variance.	(2.5 marks)
(c)	Calculate the labour price variance.	(2.5 marks)
(d)	Calculate the labour quantity variance.	(2.5 marks)

[TOTAL 20 MARKS]

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